The pectoral fin of Whales exists in two forms. In the Tootlied Whales it is shorter and rounder; in the Whalebone "Whales longer and narrower. Structural differences accompany these outward dissimilarities. In the first-named group the humeras and the beginning of the radius and ulna are within the body, and do not form a part of the fin. In the Whalebone Whales, on the other hand, the fin contains all the bones of the fore-limb. Another remarkable contrast between the hand in the two groups of Whales is that while the Toothed Whales have five fingers, thus justifying the prevailing opinion that they are the more primitive of the two groups, the Whalebone Whales have only four fingers. Actually the Sight Whale, *Balaena,* seems to have five fingers; and, indeed, the fact that it has, is often used to distinguish it from the Humpback, which has undoubtedly only four. But a careful consideration of the state of affairs which prevails in the foetus of *Balaenoptera* dispels this idea. Between what are apparently the second and third fingers, a rudimentary finger, consisting of four phalanges, appears. This is not produced, as is an additional finger found in the White Whale or Beluga, by a splitting of a finger. Accordingly the four-fingered condition of the Whalebone Whales is produced by the dropping out of a finger in the middle of the series,—a very remarkable fact. When fingers disappear, as, for intsance,, in the Horse, etc., it is at the two ends of the series that the digits vanish. If this view of Professor KilkenthaFs[I] be accepted, it follows that the pre-sumed thumb of the Eight Whale is what has been termed the prepollex.

The hand of the Whales, like those of some other aquatic creatures, *e.g.* the reptile *Ichthyosaurus,* has a larger number of phalanges than have terrestrial animals. The result of this is, of course, to increase the length of the fin and its utility as a paddle. It is commonly not all the fingers that have developed this great number of accessory phalanges. Rudimentary nails have been found upon the Cetacean hand; but in no case are they functionally developed. In the Manatees we have the

disappearance of the nails still imperfectly accomplished. In *M latirostTi®* there are nails; these have vanished, apart from possible traces to be seen with a microscope, in J£ *innnynis**

A very characteristic feature of certain Whales are the furrows

an JWaU&iere, Jena, 1889-9S.